

United States Court of Appeals
FOR THE EIGHTH CIRCUIT

No. 02-1129

United States of America,	*	
	*	
Plaintiff/Appellee,	*	
	*	Appeal from the United States
v.	*	District Court for the Northern
	*	District of Iowa.
Russell Dean Eide,	*	
	*	
Defendant/Appellant.	*	

Submitted: June 11, 2002
Filed: July 19, 2002

Before MORRIS SHEPPARD ARNOLD, HEANEY, and MURPHY, Circuit Judges.

MURPHY, Circuit Judge.

Russell Eide was found guilty by a jury of attempting to manufacture 5 grams or more of methamphetamine, in violation of 21 U.S.C. §§ 841(a)(1) and 846, and maintaining a place for methamphetamine manufacturing, in violation of 21 U.S.C. § 856(a)(1). The district court¹ sentenced him to 120 months. We affirm.

¹The Honorable Donald E. O'Brien, United States District Judge for the Northern District of Iowa.

On October 20, 2000, Webster City police officers executed a search warrant for Russell Eide's residence based on information from his mother and half sister that he was involved in the manufacture and use of methamphetamine. When officers arrived at Eide's residence they saw materials consistent with the manufacture of methamphetamine, primarily in the basement and an adjacent doghouse. These materials included rags smelling of anhydrous ammonia, a blanket reeking of ether, a tupperware container with a white powdery substance which proved to be pseudoephedrine (a precursor to methamphetamine), a large apple juice jar with a sludge-like substance subsequently found to contain trace amounts of methamphetamine, a five gallon bucket of ether, and large green tanks which could be used to store anhydrous ammonia. Due to the strong odors of ether and anhydrous ammonia, the officers contacted the Division of Narcotics Enforcement (DNE) laboratory team to conduct a more secure investigation and remove hazardous materials.

The DNE team found various items throughout Eide's residence consistent with the manufacture of methamphetamine. In addition to the items found during the initial search, the team seized two air tanks, a container of acetone, a thermos cooler, and two tops of plastic soda bottles for use as funnels. In Eide's doghouse, the team discovered several packages of lithium camera batteries, several cans of engine starting fluid, a Pyrex dish, and a container of muriatic acid. In Eide's garage were a liquid propane tank and cans of starting fluid with puncture marks. Under his bed officers found various paraphernalia, including a locked Sentry lockbox containing a balance scale, a postal scale, two glass tubes, white tablets in a plastic bag, a bag containing six glass tubes, a marijuana pipe, and a black leather bag with clear plastic baggies in it.

During the course of the search, officers also found a gas mask and a blender with white powder residue. They also found a plastic container they had seen in Eide's vehicle three days earlier during a traffic stop. At the time of the stop, officers

had suspected that Eide was involved in the manufacture of methamphetamine because they saw in his vehicle items commonly used in the theft of anhydrous ammonia – a plastic container, a cut section of bicycle inner tube, and a roll of duct tape.

Eide's former wife testified at trial that she had begun moving out of the house during the month prior to the search because of his involvement in the manufacture of methamphetamine. She reported smelling chemical and ether-like odors from the basement. She also saw a can of muriatic acid, a blender with white powder in it, and coffee filters. The filters were seen in the basement where Eide allegedly manufactured the methamphetamine. Eide's half sister testified that on the day before police searched Eide's residence she had gone into the basement and seen an apple juice jar with yellow liquid in it, a couple of bags of white powder, coffee filters, and Vicks inhalers. She also reported seeing wadded aluminum foil in other parts of the house.

Chemist Patricia Krahn of the Iowa Division of Criminal Investigation (DCI) testified at trial as the government's drug analysis expert. Krahn testified that she had received a bachelor of science degree in chemistry from the University of Iowa and that she is a member of the Midwestern Association of Forensic Scientists and the Clandestine Laboratory Investigating Chemists. She testified that she had been with the DCI Drug Analysis section for almost six years and had been focusing on clandestine laboratories for close to two and a half years. During that period she had analyzed over 500 clandestine laboratories. She reported that her on the job training at the criminalistics laboratory included both general drug analysis and the analysis of clandestine methamphetamine laboratories and that she had received additional training in both areas through the Drug Enforcement Agency, the FBI academy, and the Midwestern Association of Forensic Scientists. She testified that she had prepared methamphetamine herself by using a typical recipe found in Iowa and that she helped teach law enforcement officers about clandestine methamphetamine

laboratories. Her teaching covers items found in such labs, the methods used in them, and techniques for sampling materials taken from them.

In her official report on Eide's laboratory, Krahn determined that the substances found in Eide's residence – punctured engine starting fluid cans, muriatic acid, lithium batteries, and pseudoephedrine precursor – were consistent with an intention to manufacture methamphetamine using the lithium ammonia reduction method. She also reported that it would have been necessary to add anhydrous ammonia to create the reaction needed to produce methamphetamine.

Krahn calculated that the amount of chemicals seized from Eide's residence would have yielded 10.1 to 12.6 grams actual (pure) methamphetamine. She based this yield on her study of a number of specific factors, including substances seized from Eide's property, the report of the criminalist that attended the scene, agent notes, photographs taken during the execution of the search warrant, and an Iowa DCI study. Krahn testified that the white powder seized from Eide's doghouse weighed 79 grams and contained 35 percent pseudoephedrine, a precursor of methamphetamine. The actual amount of pseudoephedrine was 27.6 grams. Krahn calculated that the highest possible yield of actual methamphetamine from this precursor was 25.39 grams (92 percent of 27.6 grams of pseudoephedrine). She then calculated the likely yield from Eide's manufacturing processes based on the amount of by-product (CMP) left in the sludge at the bottom of the apple juice jar found in Eide's basement. Krahn tested samples from that and determined that the sludge-like liquid was consistent with engine starting fluid and contained pseudoephedrine, a small amount of methamphetamine, and very little CMP, indicating that Eide had achieved a "fairly good conversion" of precursor to methamphetamine.² This low

²The Iowa DCI study had found a correlation between CMP levels and methamphetamine yields from recipes employed by clandestine labs in the Iowa area. It found that when CMP levels are low (8 percent or less), yields varied between 35 and 63 percent. When CMP levels are high (40 to 67 percent), yields ranged between 15 and 29 percent.

amount of CMP led Krahn to conclude that Eide would have attained a 40 to 50 percent yield from manufacturing methamphetamine from the 25.39 grams of pseudoephedrine precursor. This yield would have resulted in producing 10.1 to 12.6 grams of actual methamphetamine.

Eide was found guilty by a jury of attempting to manufacture 5 grams or more of methamphetamine, in violation of 21 U.S.C. §§ 841(a)(1) and 846, and maintaining a place for methamphetamine manufacturing, in violation of 21 U.S.C. § 856(a)(1). The district court sentenced him to 120 months on each count, to be served concurrently.

Eide argues that the evidence was insufficient to show that he attempted to manufacture 5 grams or more of methamphetamine and that he should be resentenced on the included offense of simple attempted manufacturing. Eide contends that the estimate of 10.1 to 12.6 grams actual methamphetamine did not amount to proof beyond a reasonable doubt that he had attempted to manufacture 5 grams or more and that the trial court erred when it denied his motion for judgment of acquittal. Eide argues that Krahn failed to account for all the variables that might have affected the yield of methamphetamine from the precursor, such as temperature, size and shape of vessels, amount of anhydrous ammonia, and his cooking skill. Eide also claims that the Iowa DCI study Krahn used in calculating her 40 to 50 percent yield estimate is not sufficiently reliable to satisfy a finding of guilt beyond a reasonable doubt.

The government asserts that the evidence was sufficient for a jury to find beyond a reasonable doubt that Eide had attempted to manufacture 5 or more grams of actual methamphetamine. It argues that Krahn's expert testimony was based on evidence from Eide's place of operation and that her yield estimates were informed by the actual amount of CMP found at Eide's residence, not just the averages in the Iowa DCI study, and that Eide has shown nothing to refute either Eide's calculations or the conclusions in the Iowa DCI study. The government also notes that the Iowa

DCI study was introduced into evidence by Eide's own counsel and was used against Krahn on cross examination.

We review a defendant's challenge to the sufficiency of the evidence in the light most favorable to the verdict, allowing the government all reasonable inferences that may be drawn from the evidence. United States v. Butler, 238 F.3d 1001, 1003 (8th Cir. 2001). We may reverse on insufficiency of the evidence "only if no reasonable jury could find beyond a reasonable doubt that [Eide] is guilty of the offense charged." United States v. Anderson, 78 F.3d 420, 422 (8th Cir. 1996). In deciding a motion for judgment of acquittal, we neither weigh the evidence nor assess the credibility of witnesses. United States v. Pardue, 983 F.2d 843, 847 (8th Cir. 1993). Any evidentiary conflicts are resolved in favor of the verdict. United States v. Buford, 108 F.3d 151, 152 (8th Cir. 1997).

Estimating the amount a clandestine lab is capable of manufacturing may be determined from the quantity of the precursor chemicals seized together with expert testimony about their conversion to methamphetamine. United States v. Hunt, 171 F.3d 1192, 1195-96 (8th Cir. 1999). Quantity yield figures should not be calculated without regard for the particular capabilities of a defendant and the drug manufacturing site. See United States v. Anderson, 236 F.3d 427, 430 (8th Cir.) (per curiam), cert.denied, 122 S. Ct. 356 (2001) (evidence must be based not on theoretical yield but on what the particular defendant could produce); United States v. Cole, 125 F.3d 654, 655 (8th Cir. 1997) (relevant inquiry is on what the defendant, not "an average cook," is capable of yielding). See also United States v. Eschman, 227 F.3d 886, 890-91 (7th Cir. 2000) (estimates of drug production must be based on particularized facts related to the capabilities of an individual defendant's drug laboratory); United States v. Hamilton, 81 F.3d 652, 654-55 (6th Cir. 1996) (same); United States v. Mahaffey, 53 F.3d 128, 132-33 (6th Cir. 1995) (same).

The particularized nature of Krahn's testimony, combined with additional evidence suggesting that Eide was experienced in the manufacture of

methamphetamine, were sufficient for a jury to find beyond a reasonable doubt that Eide was a good cook capable of producing a 40 to 50 percent yield.³ Krahn had established herself as an expert in the analysis of clandestine methamphetamine laboratories in Iowa, had received substantial training on the subject, and had analyzed over 500 laboratories. Krahn also made it clear that her conclusions were drawn from the particular methamphetamine manufacturing processes used in Eide's basement. The jury heard Krahn testify that the specific CMP levels found in Eide's lab indicated that his lithium ammonia reduction process was capable of producing a 40 to 50 percent yield from the 25.39 grams of precursor. The DCI study had found that similarly low CMP levels correlated to high yields of methamphetamine when recipes from clandestine labs in the Iowa area were used to manufacture methamphetamine by the lithium ammonia reduction method.

The jury also heard testimony from police, DNE officers, and Eide's family members indicating that he was heavily involved in the manufacture of methamphetamine. Police and DNE officers testified to the large amount of evidence gathered at Eide's residence that was consistent with the production of methamphetamine manufacturing, including cans of engine starting fluid, muriatic acid, liquid propane tanks, lithium camera batteries, crushed pseudoephedrine, rags smelling of anhydrous ammonia, scales, plastic baggies, and the sludge-like substance containing trace amounts of methamphetamine. The jury heard Eide's half sister testify about suspicious objects she had seen in his lab, including a couple of bags of white powder, coffee filters and the apple juice jar, and Eide's former wife testified that she had smelled chemicals coming from the basement and had seen coffee filters and a blender with white powder.

³We note parenthetically that even if the jury had found that Eide's lab was capable of producing only a 20 percent yield, such a finding would have been sufficient to reach the 5 gram threshold.

The combined effect of Krahn's particularized testimony and the strong and detailed circumstantial evidence linking Eide to the manufacture of methamphetamine were enough for the jury to conclude that Krahn's calculations were an accurate estimate of Eide's manufacturing capabilities. We conclude that there was sufficient evidence to find beyond a reasonable doubt that Eide had attempted to manufacture 5 or more grams of methamphetamine.

Accordingly, we affirm the judgment of the district court.

A true copy.

Attest:

CLERK, U.S. COURT OF APPEALS, EIGHTH CIRCUIT.